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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,642	10/11/2001	Robert E. Haines	10007583-1	2054

7590 08/12/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

POND, ROBERT M

ART UNIT	PAPER NUMBER
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3625

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,642

Applicant(s)

HAINES ET AL.

Examiner

Robert M. Pond

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Applicant added Claim 30-35. All pending claims 1-35 were examined in this non-final Office Action necessitated by new grounds of rejection.

Response to Arguments

Rejection under 35 USC 103

Applicant's arguments, see Remarks, filed 29 April 2005, with respect to the rejection(s) of claim(s) 1-35 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Internet Appliances and Manchala.

The examiner is offering examples of prior art that discloses embedded web server technology, using fax or e-mail to communicate printer status, known facts about printers requiring periodic maintenance, using embedded server and e-mail communications from the printer to request toner directly from a supplier, and printers sending e-mail notifications to service/support entities indicating a need for service, soon to be needed service, or preventative maintenance service:

- Baker discloses the latest generation of copiers integrating a whole new level of intelligence-ability to fax or email the key operator or service center when the machine is low on toner/pager or nearing a maintenance check (Item W: see at least page 4).
- Peisel discloses embedding web server technology into peripherals and employing e-mail communications to report on peripheral status. Peisel further discloses web-enabled printers detecting toner low status and sending an e-mail message to a supplier to deliver the toner cartridge (Item X: see at least page 3).
- Steinfield discloses Internet appliances sending and receiving e-mail, a Xerox printer incorporating embedded web server technology to send e-mail to the administrator when the printer requires or will soon require service (UU: see at least page 2).
- Trembly discloses Xerox printer e-mail feature avoiding obstacles like network firewalls. Features enable proactive ordering of supplies (VV: see at least page 3).
- Office World News discloses Internet copiers and printers, and discloses dealer's customizing a copier's embedded web site with their logos, personalized messages to customers and links to their corporate web sites for supplies and support. Office World News further discloses Hitachi's Internet printers sending emails to technicians to send early warning notifications for preventative

maintenance and consumables replenishment (Item WW: see at least pages 1 and 2).

- Business Wire discloses Internet Printing Protocol standards being available and further discloses IPP allowing the server to be either a separate print server or a printer with embedded networking and server capabilities (Item XX: see at least page 2).
- Harbaugh discloses printers as the most demanding part of the network, requiring consumable replenishment and periodic maintenance.
- Example of web document hits discussing fax and email.

Rejection under 101

Applicant's arguments filed 29 April 2005 have been fully considered but they are not persuasive. Signals embodied in a carrier wave are non-statutory.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 1. Claims 21-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

If the signal claim is interpreted as an abstract arrangement "to be transmitted", or as a transmission in transit, rather than a physical signal statically

embedded in a physical computer readable medium, the signal claim is considered non-statutory. A signal is insubstantial and therefore neither concrete nor tangible. It is a pattern that is evident over a period of time by measuring the changes in level of some attribute, such as voltage or current, at a given point. A signal in transmission is none of a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. It is information transmitted as energy, encoded to endow it with intelligible patterns for subsequent interpretation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2. Claims 1-20 and 28-35 are rejected under 35 USC 103(a) as being unpatentable over Internet Appliances (a collection of prior art cited in PTO-892, Items: X and UU hereinafter referred to as "IA") in view of Manchala (Paper # 20040726, US 6,405,178).**

IA discloses embedding web servers into peripheral equipment to move from simple one-way file transfer to two-way web technology that manages and monitors a printer, sends and receives email regarding printer status (e.g. status

of consumables, requires service now or will in the future required service) (X: see at least page 2; UU: see at least page 1). IA further discloses:

- :Determining by a process within a peripheral device that an amount of a consumable associated with the peripheral device has decreased below a pre-determined threshold: networked printer notifies an administrator when the printer is running out of paper, needs toners, or has a paper jam (UU: see page 2).
- Transmitting an email from the peripheral device to order additional supplies of the consumable: when toner is low, sending an email to a supplier to deliver the toner cartridge (X: see page 3).
- Requesting periodic maintenance: Internet appliance sends urgent email to request periodic maintenance (UU: see page 2).

IA teaches all the above as noted under the 103(a) rejection and teaches a) internet appliances becoming more proactive using embedded web server technology, b) incorporating e-mail into a Xerox color laser to send email to an administrator when the printer requires or will soon require service (please note examiner's interpretation: proactive monitoring improves printer availability to users), and c) a web-enabled printer sending an email directly to a supplier to deliver a toner cartridge once a toner low condition is detected, but does not specifically disclose ordering the toner cartridge. Manchala teaches an electronic commerce enabled purchasing system, whereby when a networked printer determines a toner low threshold condition, it sends an event notification to the

network server which will order toner directly from an online supplier via email messaging across a firewall (see at least abstract; col. 3, lines 25-36; col. 4, lines 15-22). Therefore it would have been obvious to one of ordinary skill in the art at time of the invention to modify the method of IA to order consumables from the supplier who delivers the toner using email across a firewall as taught by Manchala, in order to be more proactive in printer servicing, and thereby increase printer availability to users.

Pertaining to computer-usable medium claims 8-14

Rejection of claims 8-14 is based on the same rationale as noted above.

Pertaining to system claims 15-20, 34, and 35

Rejection of claims 15-20, 34, and 35 is based on the same rationale as noted above

2. **Claims 21-27 are rejected under 35 USC 103(a) as being unpatentable over IA (a collection of prior art cited in PTO-892, Items: X and UU) and Manchala (Paper # 20040726, US 6,405,178), further in view of Official Notice (regarding old and well known in the arts)**

IA discloses embedding web servers into peripheral equipment to move from simple one-way file transfer to two-way web technology that manages and monitors a printer, sends and receives email regarding printer status (e.g. status of consumables, requires service now or will in the future required service) (X: see at least page 2; UU: see at least page 1). IA further discloses:

- Determining by a process within a peripheral device that an amount of a consumable associated with the peripheral device has decreased below a pre-determined threshold: networked printer notifies an administrator when the printer is running out of paper, needs toners, or has a paper jam (UU: see page 2).
- Transmitting an email from the peripheral device to order additional supplies of the consumable: when toner is low, sending an email to a supplier to deliver the toner cartridge (X: see page 3).
- Requesting periodic maintenance: Internet appliance sends urgent email to request periodic maintenance (UU: see page 2).

IA teaches all the above as noted under the 103(a) rejection and teaches a) internet appliances becoming more proactive using embedded web server technology, b) incorporating e-mail into a Xerox color laser to send email to an administrator when the printer requires or will soon require service (please note examiner's interpretation: proactive monitoring improves printer availability or up-time to users), and c) a web-enabled printer sending an email directly to a supplier to deliver a toner cartridge once a toner low condition is detected, but does not specifically disclose ordering the toner cartridge. Manchala teaches an electronic commerce enabled purchasing system, whereby when a networked printer determines a toner low threshold condition, it sends an event notification to the network server which will order toner directly from an online supplier via email messaging across a firewall (see at least abstract; col. 3, lines 25-36; col.

4, lines 15-22). Therefore it would have been obvious to one of ordinary skill in the art at time of the invention to modify the method of IA to order consumables from the supplier who delivers the toner using email across a firewall as taught by Manchala, in order to be more proactive in printer servicing, and thereby increase printer availability to users.

IA and Manchala teach all the above as noted under the 103(a) rejection but do not teach embodied signal in a carrier wave. The Examiner takes the position that it is old and well known that electronic computer systems use electronic signals to operate and that digital signals are embodied in a carrier wave. Therefore it would have been obvious to one of ordinary skill in the art at time of the invention to disclose electronic signals as taught by Official Notice, in order for computer systems to operate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Proquest: summary of web search conducted on 23 July 2005 with a prior publication date of 10 October 1997, 1pg.
- Proquest: summary of web search conducted on 23 July 2005 with a prior publication date of 10 October 2000, 1pg.
- Baker, Glenn; "Outside the box," New Zealand Management, August 2000, Proquest #58193134, 6pgs; teaches latest generation of copiers integrating a whole new level of intelligence-ability to fax or email the key operator or service center when the machine is low on toner/pager or nearing a maintenance check.
- Trembly, Ara; "Thin-clients heads product introductions," National Underwriter, 30 August 1999, Proquest #44310950, 4pgs; teaches Xerox printer e-mail feature avoiding obstacles like network firewalls; features enable proactive ordering of supplies (VV: see at least page 3).
- Office World News; "I-copiers and i-printers give dealers the right connections," October 2000, Proquest #63236094, 4pgs; teaches Internet copiers and printers, and discloses dealer's customizing a copier's embedded web site with their logos, personalized messages to customers and links to their corporate web sites for supplies and

support. Office World News further discloses Hitachi's Internet printers sending emails to technicians to send early warning notifications for preventative maintenance and consumables replenishment.

- Business Wire; "Internet Printing Protocol standards now available; ..." 04 October 2000, Proquest #62046173, 3pgs; teaches Internet Printing Protocol standards being available and further discloses IPP allowing the server to be either a separate print server or a printer with embedded networking and server capabilities.
- Harbaugh, Logan; "Painless printer management," 13 April 1998, Proquest #28667470, 5pgs; teaches printers as the most demanding part of the network; require consumable replenishment and periodic maintenance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Pond whose telephone number is 571-272-6760. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wynn Coggins can be reached on 571-272-7159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. M. Pond', with a stylized flourish at the end.

Robert M. Pond
Primary Examiner
August 8, 2005